

REMARKS

This responds to the Office action mailed November 24, 2008. Claims 1, 5 and 7, and 10-15 are amended. As a result, claims 1, 3, 5-7, and 10-17 are now pending in this application.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 3, 5-7, and 10-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,708,845 to Wistendahl et al. (“Wistendahl”) in view of U.S. Patent No. 5,699,106 to Matsubara et al. (“Matsubara”). This rejection is respectfully traversed.

Applicants respectfully submit that the Office Action did not establish a *prima facie* case of obviousness in connection with any of the above rejections because the cited references, alone or in any combination, fail to teach or suggest all of the elements of Applicants’ claimed invention. The references must teach or suggest all the claim elements in order to establish a *prima facie* case of obviousness.¹

Moreover, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.² The fact that a reference teaches away from a claimed invention is highly probative that the reference would not have rendered the claimed invention obvious to one of ordinary skill in the art.³

Independent claim 1 as amended recites, in part, “the private data includes an event identification for the at least one of audio or video data, and binary data and an indication of a number of hot-spots, each hot-spot being linked to at least one of different audio or video data, and different binary data by link data, the link data including a set of coordinates defining a location on the playing device, link event identification indicating the at least one different audio or video data, and different binary data coupled to the set of coordinates.” Independent claim 1 further recites “a receiver to receive the digital signal at user locations and to play at least one of the audio or video data, and binary data on the playing device, and to selectively exercise upon a hot-spot by reading the link data and playing the at least one of different audio or video data, and different binary data on the playing device.” Applicants cannot find these claim elements in the references. In particular, Wistendahl and Matsubara alone or in any combination, fail to teach or suggest the above claim limitations. Similarly, independent claim 7 includes substantially the

¹ 3 M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

² *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

³ See *Stranco Inc. v. Atlantes Chemical Systems, Inc.*, 15 U.S.P.Q.2d 1704, 1713 (Tex. 1990).

same claim limitations as independent claim 1, and therefore these same claim limitations recited in independent claim 7 are not found in Wistendahl or Matsubara.

Wistendahl relates to a system for mapping objects in digital media presentations as hot spots without embedding any special codes in the original digital media content.⁴ Wistendahl describes hot spots as corresponding to different objects within an individual frame. For example, in reference to FIG. 2, Wistendahl discloses:

“an individual frame is illustrated showing an image of an object A such as a face next to an object B such as the sun. In interactive use, the user can point at (click on) the face A or the sun B to connect to further information or a further development in the story being presented. In accordance with the invention, the original media content is converted to interactive use without embedding special codes in the digital data for the frames, by mapping the “hot spots” as separate data which are used in an interactive digital media program associated with the media content. Thus, for the frame F_i , a “hot spot” area $A'(F_i)$ is mapped for the object A, and a “hot spot” area $B'(F_i)$ is mapped for the object B.”⁵

After selecting a hot spot encompassing a particular object, Wistendahl discloses displaying information about that particular object, such as trivia information, and/or initiating an Internet connection to obtain additional information about the object.⁶

Matsubara relates to an interactive program selecting system that permits “interactive program selection through only a down-link line in the broadcasting type CATV system and permit[s] changing of broadcasting signal and the number of data scanning operations to be suppressed upon the interactive program selection.”⁷ “[A] broadcasting station issues to [an] optical cable a great number of broadcasting signals each containing a broadcasting signal for menu in which data in units of one menu screen are consecutively arranged on the time axis, and the tuner receives a desired channel from broadcasting signals transmitted through the optical cable.”⁸ “A menu screen information extractor ... extracts menu screen information from the broadcasting signal ... and then extracts and separates display data and control data from the extracted menu screen information.”⁹

The present application discloses “When a hot-spot is accessed *it provides a link to a video, audio, graphics or data event, for example, one of the video channels 120-130.*

⁴ See Col. 4, lines 60-63.

⁵ See Col. 5, lines 46-58.

⁶ See Col. 8, lines 41-54.

⁷ See Col. 1, lines 50-55.

⁸ See Col. 2, lines 14-20.

⁹ See Col. 3, lines 17-20.

Regarding the selection of a hot-spot, the present application discloses “When the user makes a selection (usually by activating a button on a controller such as an infrared remote control), if the set-top box finds that a hot-spot exists and is currently activated, the program automatically changes the state of the screen being displayed, so that it links to the event indicated by the hot-spot. In the typical situation, this would be *a different video sequence*. “[E]ach hot-spot might overlay the video of a separate movie.”¹⁰ In other words, the hot-spots as claimed and described in the present application link to different data such as different audio or video data and different binary data. Wistendahl fails to teach or suggest the hot-spot as claimed. More specifically, Wistendahl fails to teach or suggest “a signal generator to generate a digital signal comprising ... the private data including an event identification for the at least one of audio or video data, binary data and an indication of a number of hot-spots, each hot-spot being linked to at least one of different audio or video data, and different binary data.” Wistendahl also fails to teach or suggest a receiver ... to play at least one of the audio or video data, and binary data on the playing device, and to selectively exercise upon a hot-spot by reading the link data and playing the at least one of different audio or video data, and different binary data on the playing device. The proposed combination with Mastubara does not overcome these defects.

The Examiner acknowledges that Wistendahl fails to disclose the limitation of continuously broadcasting the digital signal, but asserts that “Mastubara teaches that the menu screen and channel information are cyclically transmitted and the invention is operated without up-link transmission.”¹¹ Applicants respectfully submit that cyclically transmitting menu screen and channel information without an up-link transmission is not the same as “continuously broadcasting the digital signal from a head end server without transmission from the playing device for playing at least one of the audio or video data, and binary data and the at least one of different audio or video data, and different binary data.”

The present application also discloses “*X-Y protocol data is embedded in an MPEG2 transport stream*” and that “[t]he data is transmitted in the N private data bytes. Part of the N private data bytes are dedicated to one of the X-Y protocol data segments for the first of the hot-spots described in the switching schedule (FIG. 7).”¹² Thus, at least a part of the private data, X-Y protocol data, is embedded in the MPEG2 transport stream. Applicants submit that Wistendahl teaches away from the claimed “signal generator which generates digital signal

¹⁰ See Application, page 3, paragraph 36.

¹¹ See Office action at page 4

¹² See Application, page 4, paragraph 49. (Emphasis Added).

comprising interleaved bits of at least one of audio or video data, binary data for play on a playing device, and **private data**” by disclosing mapping of objects **without embedding** any special codes in the original digital media content.

Based on the foregoing, Wistendahl and Matsubara, alone or in any combination, do not teach or suggest every claim limitation of independent claims 1 and 7. Therefore, Applicants respectfully request the withdrawal of the §103(a) of his rejection and allowance of independent claims 1 and 7.

Applicants submit that a dependent claim incorporates each of the claim elements of the independent claim from which it properly depends, and more. Applicants assert for the reasons stated above, that Wistendahl and Matsubara, alone or in any combination do not teach or suggest¹³ all of the claim elements of dependent claims 3, 5, 6, and 10-17. Accordingly, the Applicants respectfully request that the Examiner withdraw his rejection of claims 3, 5, 6, and 10-17 and indicate the allowance thereof.

The amendments to the claims were made solely for the purpose of clarifying terms in the claim and such amendments should not be construed in any way as narrowing the scope of the claim or its equivalents.

¹³ The references when combined must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Conclusion

Based on the foregoing, it is submitted that the claims 1, 3, 5-7, and 10-17 are patentable over the references of record. Issuance of a Notice of Allowance is solicited. Applicant's attorney welcomes the opportunity to discuss the case with the Examiner in the event there are any questions or comments regarding the response or the application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-1662.

Respectfully submitted,

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Dated

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